JPL Earth Occultation Analysis Package: Status & Data Product

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Fifty-five known cosmic sources are currently being monitored by BATSE, period by period, using the JPL "Enhanced BATSE Occultation Package" (EBOP). At the time of writing this Abstract, daily count rates of these sources in 16 energy channels along with their corresponding estimated errors, both Poisson and systematic, for the first several Viewing Periods (1, 2, 2.5 and 3) have been delivered to the Compton Gamma-Ray Observatory Science Support Center (CGRO/SSC) and the PI's institution at MSFC. Count-rate spectra at the CGRO/SSC may be conveniently converted to photon spectra using XSPEC. Associated routines have been provided also to interface the EBOP count-rate spectra to XSPEC for conversion to physical units and further display and manipulation. Results produced by EBOP are currently being studied and cross checked against those obtained simultaneously by OSSE, COMPTEL and SIGMA. In this paper, we provide an update of the EBOP status and capability, and a description of its data products. As a demonstration of the capability of the EBOP data products, we present spectra and light curves of several cosmic sources, and show specifically the level of consistency of results obtained by the different BATSE LAD's. We compare also the EBOP results with those derived by the MSFC earth-occultation analysis package and with available simultaneous observations of OSSE, COMPTEL and SIGMA.

Oral presentation preferred (need 151020 minutes)

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